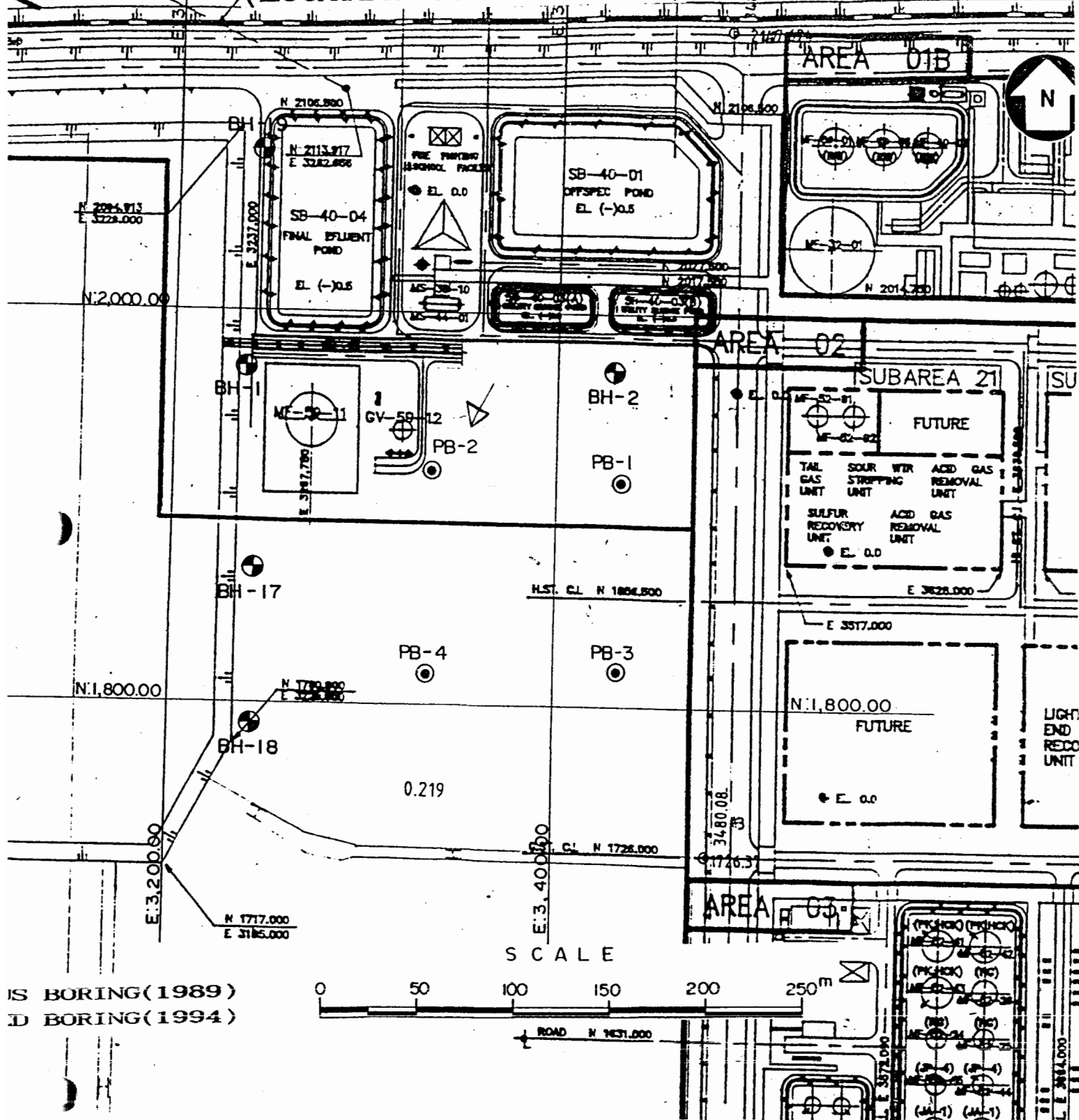


SUBSURFACE
PIPE LINE

CENTER OF DICE N 2145.484
E 3274.486

AREA 01

조사위치평면도(3) (LOCATION PLAN OF BORE)



IS BORING(1989)
ID BORING(1994)

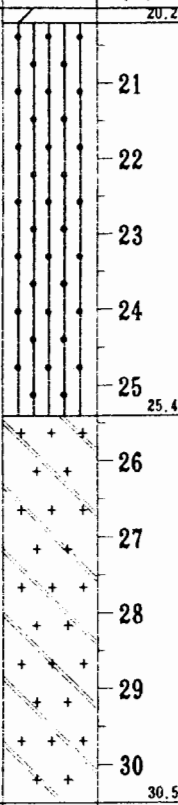
試錐柱狀圖

2 枚中 1 枚

調査名 : 공장지역 시설확충 예정부지 기초지반조사					試錐孔番 : BH-1	
發注處 : 현대 정유(주)					標高 : -0.04 m, PLANT 基準面	
調査位置 : N = 1,973.00 E = 3,238.00					試錐孔内水位(深度) : 2.30 m	
調査形式 : 회전수세식					試錐工 : 이유영	
調査日字 : JAN. 27 - JAN. 28, 1994					擔當者 : 서태원	
形式	柱狀圖	深度 (m)	試料	N - 値 (回/cm)	RQD 回收率	觀察記錄
			0.5	5/30		매립토층 : 0.00 - 3.20 미터 실트질 세립내지 조립모래 (SM), 자갈을 함유함, 갈색, 습하며, 느슨함.
		1				
		2	2.0	8/30		
		3	3.2			
			3.5	5/30		퇴적토층-A : 3.20 - 20.20 미터 3.20 - 5.70 미터 실트질 세립모래 (SM), 조개껍질을 함유함, 암회색, 포화상태, 느슨함.
		4				
		5	5.0	7/30		
		5.7				
		6	6.5	4/30		5.70 - 10.00 미터 점토질 실트 (ML), 중간정도의 소성도 보임, 암회색, 포화상태, 연약함내지 중간정도의 굳기 보임.
		7	7.8 U/D 7.8	4/30		
		8				
		9	9.5	17/30		
		10	10.0			
		11	11.0	22/30		10.00 - 13.00 미터 점토질 실트 (ML), 낮은 소성도 보임, 적갈색, 축축함, 굳음.
		12	12.5	12/30		
		13	13.0			13.00 - 16.80 미터 실트질 점토 (CL), 중간정도의 소성도 보임, 회색, 포화상태, 굳음.
		14	14.0	9/30		
		15	15.5	11/30		
		16	16.8			16.80 - 18.70 미터 실트질 세립내지 조립모래 (SM), 자갈을 함유함, 회갈색, 축축함, 중간정도의 상대밀도.
		17	17.0	31/30		
		18	18.5	17/30		18.70 - 20.20 미터 실트질 점토 (CL), 중간정도의 소성도 보임, 회색, 포화상태, 굳음.
		19				
		20	20.2	24/30		-- (계속) --

試錐柱狀圖

2 枚中 2 枚

調査名 : 공장지역 시설확충 예정부지 기초지반조사				試錐孔番 : BH-1	
發注處 : 현대 정유(주)				標高 : -0.04 m, PLANT 基準面	
調査位置 : N = 1,973.00 E = 3,238.00				試錐孔內水位(深度) : 2.30 m	
調査形式 : 회전수세식				試錐工 : 이유영	
調査日字 : JAN. 27 - JAN. 28, 1994				擔當者 : 서태원	
形式	柱狀圖	深度 (m)	試料	N - 值 (回/cm)	RQD 回收率
		20.2			
		21	21.5	25/30	
		22			
		23	23.0	33/30	
		24	24.5	27/30	
		25			
		25.4			
		26	26.0	50/4	
		27	27.5	50/4	
		28			
		29	29.0	50/6	
		30	30.5	50/3	
		30.5			
		31			
		32			
		33			
		34			
		35			
		36			
		37			
		38			
		39			
		40			

퇴적토층-B : 20.20 - 25.40 미터

실트질 세립내지 중립모래 (SM),
자갈을 함유함,
회갈색내지 암회색, 축축함,
중간정도의 상대밀도 보임.

풍화암층 : 25.40 - 30.50 미터

기반암의 풍화대로서
암편을 함유한 실트질 모래로 분해됨,
암갈색내지 회갈색, 매우 치밀함.

----- 심도 30.5 m 에서 시추종료 -----

試錐柱狀圖

2 枚中 1 枚

調査名 : 공장지역 시설확충 예정부지 기초지반조사	試錐孔番 : BH-2
發注處 : 현대 정유(주)	標高 : -0.04 m, PLANT 基準面
調査位置 : N = 1,972.00 E = 3,430.00	試錐孔內水位(深度) : 1.50 m
調査形式 : 회전수 세식	試錐工 : 이 유 영
調査日字 : JAN. 24 - JAN. 25. 1994	擔當者 : 서 태 원

形式	柱狀圖	深度 (m)	試料	N - 值 (回/cm)	RQD 回收率	觀察記錄
						<p>매립토층 : 0.00 - 3.00 미터 실트질 각진자갈 (GM), 갈색, 습하며, 중간내지 느슨함.</p> <p>퇴적토층-A : 3.00 - 23.70 미터 3.00 - 4.50 미터 실트질 세립모래 (SM), 회색, 포화상태, 중간정도의 상대밀도.</p> <p>4.50 - 6.90 미터 세립모래질 실트 (ML), 회색, 포화상태, 중간정도의 상대밀도.</p> <p>6.90 - 23.70 미터 실트질 점토 (CL), 세립모래를 함유함, 회색, 포화상태, 연약함내지 중간정도의 굳기.</p> <p>-- (계속) --</p>
		1	1.5	38/30		
		2				
		3	3.5	18/30		
		4	5.0	15/30		
		5	6.5	4/30		
		6	8.0	3/30		
		7	8.7			
		8	U/D 9.5	2/30		
		9	10.5	4/30		
		10	11.8			
		11	U/D 12.0	6/30		
		12	13.5	6/30		
		13	15.0	5/30		
		14	16.5	7/30		
		15	18.0	8/30		
		16	19.5	9/30		
		17				
		18				
		19				
		20				

試錐柱狀圖

2 枚中 2 枚

調査名 : 공장지역 시설확충 예정부지 기초지반조사				試錐孔番 : BH-2		
注 處 : 현대 정유(주)				標 高 : -0.04 m, PLANT 基準面		
調査位置 : N = 1,972.00 E = 3,430.00				試錐孔内水位(深度) : 1.50 m		
調査形式 : 회전수세식				試錐工 : 이유영		
調査日次 : JAN. 24 - JAN. 25, 1994				擔當者 : 서태원		
形式	柱狀圖	深度 (m)	試料	N - 値 (回/cm)	RQD 回收率	觀 察 記 錄
		21	21.0	8/30		<u>퇴적토층-B : 23.70 - 30.40 미터</u> 23.70 - 26.30 미터 점토질 세립내지 조립모래 (SC), 자갈을 함유함, 회갈색내지 갈색, 축축함, 중간정도의 상대밀도 상부에 불규칙하게 점토가 혼재함.
		22	22.5	10/30		
		23	23.7	17/30		
		24	24.0	21/30		
		25	25.5	21/30		26.30 - 30.40 미터 모래섞인 실트질 자갈 (GM), 회갈색, 축축함, 치밀함.
		26	26.3	50/28		
		27	27.0	50/18		
		28	28.5	50/17		
		29	30.0	50/17		<u>잔류토층 : 30.40 - 34.50 미터</u> 실트질 세립내지 조립모래 (SM), 갈색, 습하며, 치밀함.
		30	30.4	50/20		
		31	31.5	50/17		
		32	33.0	50/15		
		33	34.5	50/13		<u>풍화암층 : 34.50 - 39.00 미터</u> 기반암의 풍화대로서 암편을 함유한 실트질 모래로 분해됨, 암갈색, 매우 치밀함.
		34	34.5	50/8		
		35	36.0			
		36	37.5			
		37	39.0	50/4		----- 심도 39 m 에서 시추종료 -----
		38				
		39				
		40				


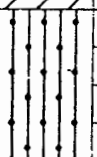
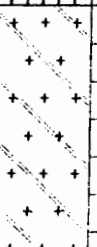
DRILL LOG

sheet 1 of 2

PROJECT : HORC EXPANSION SITE					HOLE No. :	PB-001
CLIENT : HYUNDAI OIL REFINERY CD., LTD					ELEV. :	-0.34 m, H. P. P. DATUM
LOCATION : N = 1,916.00 E = 3,430.00					GROUND WATER DEPTH :	2.50 m
TYPE OF BORING : rotary wash					DRILLED BY :	S. C. PARK
DATE : MAY. 10. 1989					LOGGED BY :	S. H. JANG
TYPE	PROFILE	DEPTH (m)	SAMPLE	S.P.T.	RQD RECOV.	DESCRIPTION
			0.5	32/30		Fill : 0.00 - 2.70 m sandy angular GRAVEL with silt (GM), light brown, moist, medium in density.
		1	2.0	29/30		
		2	3.0	4/30		Marine deposit : 2.70 - 17.30 m
		2.7	4.5	5/30		2.70 - 5.50 m silty fine SAND (SM), non-plasticity, grey, saturated, loose.
		3	6.0	3/30		5.50 - 11.00 m very fine sandy SILT (ML), low-plasticity, grey, saturated, soft.
		4	7.5	2/30		
		5	9.0	3/30		
		5.5	10.5	5/30		
		6	12.0	11/30		11.00 - 16.00 m silty CLAY (CL), low-plasticity, grey, saturated, stiff.
		7	13.5	15/30		
		8	15.0	7/30		
		9	16.5	6/30		16.00 - 17.30 m silty CLAY (CL), medium-plasticity, brownish grey, wet, medium in consistency.
		10	18.0	15/30		
		11	19.5	12/30		Basal deposit : 17.30 - 28.00 m
		11.0				17.30 - 19.70 m silty fine to medium SAND (SM), light brown, wet, medium in density.
		12				-- (continued) --
		13				
		14				
		15				
		16				
		17				
		17.3				
		18				
		19				
		19.7				
		20				

DRILL LOG

sheet 2 of 2

PROJECT : HORC EXPANSION SITE					HOLE No. : PB-001	
CLIENT : HYUNDAI OIL REFINERY CD.,LTD					ELEV. : -0.34 m, H. P. P. DATUM	
LOCATION : N = 1,916.00 E = 3,430.00					GROUND WATER DEPTH : 2.50 m	
TYPE OF BORING : rotary wash					DRILLED BY : S. C. PARK	
DATE : MAY. 10. 1989					LOGGED BY : S. H. JANG	
TYPE	PROFILE	DEPTH (m)	SAMPLE	S.P.T.	RQD RECOV.	DESCRIPTION
		21	21.0	8/30		19.70 - 26.00 m silty CLAY (CL), low-plasticity and grey (19.70 - 23.00m) high-plasticity and dark brown, wet, stiff.
		22	22.5	7/30		
		23				
		24	24.0	10/30		
		25	25.5	18/30		
		26 ^{26.0}				26.00 - 28.00 m sub-angular gravelly fine to medium SAND (SM), light brown, wet, medium in density.
		27	27.0	29/30		
		28 ^{28.0}				
		28	28.5	50/13		<u>Bedrock : 28.00 - 31.50 m</u> highly weathered bedrock crumbles to silty sand and rock fragments, dark brown, very dense, contains many mica. ----- Terminated at 31.5 m in depth -----
		29				
		30	30.0	50/14		
		31 ^{31.5}	31.5	50/10		
		32				
		33				
		34				
		35				
		36				
		37				
		38				
		39				
		40				

DRILL LOG

sheet 1 of 2

PROJECT : HORC EXPANSION SITE					HOLE No. :	PB-002
CLIENT : HYUNDAI OIL REFINERY CO., LTD					ELEV. :	-0.37 m, H. P. P. DATUM
LOCATION : N = 1,922.00 E = 3,330.00					GROUND WATER DEPTH :	2.30 m
TYPE OF BORING : rotary wash					DRILLED BY :	S. C. PARK
DATE : MAY. 9. 1989					LOGGED BY :	S. H. JANG
TYPE	PROFILE	DEPTH (m)	SAMPLE	S.P.T.	RQD RECOV	DESCRIPTION
			0.5	6/30		<u>Fill : 0.00 - 2.40 m</u> silty GRAVEL (GM), light brown, moist, loose.
		1				
		2	2.0	15/30		<u>Marine deposit : 2.40 - 17.90 m</u>
		2.4				
		3	3.5	12/30		2.40 - 4.00 m silty fine SAND (SM), non-plasticity, grey, saturated, medium in density, contains shell fragments.
		4				
		4.0				
		5	5.0	4/30		
		6	6.5	3/30		4.00 - 6.00 m fine sandy SILT (ML), slightly-plasticity, grey, saturated, loose.
		6.0				
		7				
		8	8.0 U/D			6.00 - 17.90 m silty CLAY (CL), low to medium plasticity, grey, saturated, soft.
		9	9.5	4/30		
		10				
		11	11.0	5/30		
		12	12.5	2/30		
		13				
		14	14.0	3/30		
		15	15.5	3/30		
		16				
		17	17.0	4/30		
		17.9				<u>Basal deposit : 17.90 - 26.30 m</u>
		18	18.5	7/30		17.90 - 19.00 m silty fine SAND with clay (SM), low-plasticity, dark grey, saturated, loose.
		19				
		19.6				
		20	20.0	7/30		-- (continued) --

DRILL LOG

sheet 2 of 2

PROJECT : HORC EXPANSION SITE					HOLE No. :	PB-002
CLIENT : HYUNDAI OIL REFINERY CO., LTD					ELEV. :	-0.37 m, H. P. P. DATUM
LOCATION : N = 1,922.00 E = 3,330.00					GROUND WATER DEPTH :	2.30 m
TYPE OF BORING : rotary wash					DRILLED BY :	S. C. PARK
DATE : MAY. 9. 1989					LOGGED BY :	S. H. JANG
TYPE	PROFILE	DEPTH (m)	SAMPLE	S.P.T.	RQD / RECOV	DESCRIPTION
		21	21.5	8/30		19.00 - 26.30 m clayey SILT (ML), medium plasticity, dark grey, wet, stiff to very stiff, contains fine sand and organic matters at lower part.
		22				
		23	23.0	20/30		
		24	24.5	19/30		
		25				
		26	26.0	18/30		<u>Residual soil : 26.30 - 31.50 m</u> silty fine to medium SAND (SM), light brown, moist, medium to dense, getting denser with depth.
		26.3				
		27	27.5	28/30		
		28				
		29	29.0	42/30		
		30	30.5	44/30		<u>Bedrock : 31.50 - 35.00 m</u> 31.50 - 33.00 m highly weathered bedrock of gneiss, light brown, very dense.
		31				
		31.5	32.0	50/14		
		32				
		33				
		33.0				33.00 - 35.00 m partly weathered bedrock of gneiss, yellowish brown, many cracks. ----- Terminated at 35 m in depth -----
		34				
		35			10	
		35.0				
		36				
		37				
		38				
		39				
		40				

